

CLAIMS

1. An electrically powered hand held drilling and/or hammering tool having a dust collection unit powered by a motor (51) housed in the unit, which unit can be releasably fitted to the tool, comprising;

a plug arrangement (12) and a cooperating socket arrangement (28), one of which is formed on the tool and the other of which is formed on the unit, for electrically connecting the power supply for the tool to the motor (51) of the unit;

a first mechanical fixing arrangement comprising a first projection (8) and a first cooperating recess (54), one of which is formed on the tool and the other of which is formed on the unit, located adjacent the respective part of the plug and socket arrangements; and

a second mechanical fixing arrangement, located remotely from the first and comprising a manually actuable releasable fixing arrangement (72,66) and a second cooperating recess (60), one of which is formed on the tool and the other of which is formed on the unit,

wherein the first and second mechanical fixing arrangements cooperate to secure the dust collection unit to the tool in such a way that the plug and socket arrangements form an electrical connection.

2. A tool according to claim 1 wherein, the first recess (54) extends at an oblique angle to, and preferably substantially perpendicular, to the second recess (60).

3. A tool according to claim 1 or claim 2 wherein the releasable fixing arrangement comprises a latching peg (66) which extends at an oblique angle to, and preferably substantially perpendicular, to the first projection (8).

4. A tool according to any one of the preceding claims wherein the plug arrangement (12) comprises a plurality of electrical connection pins (6) and the first projection (8) is adjacent to the plug arrangement (12) and extends alongside the pins.

5. A tool according to any one of the preceding claims wherein the plug arrangement (12) and the first projection (8) are located adjacent each other on one of the tool or the dust collection unit.

6. A tool according to any one of the preceding claims wherein the socket arrangement (28) and the first recess (54) are located adjacent each other on one of the tool or the dust collection unit.
7. A tool according to any one of the preceding claims wherein the plug arrangement (12) is located on the dust collection unit and the socket arrangement (28) is located on the tool.
8. A tool according to any one of the preceding claims wherein the socket arrangement (28) is adjacent to the first recess (54) on one of the tool or the unit and the plug arrangement is adjacent to the first projection (8) on the other of the tool or unit and the socket arrangement additionally comprises a socket cover (30), for covering an entrance (22) to the sockets arrangement when the unit is not fitted to the tool, which socket cover is engageable by the first projection (8) to open the entrance (22) when the unit is fitted to the tool.
9. A tool according to claim 8 wherein the socket cover is slideable and an arm (30b) of the socket cover extends into the first recess (54) and is engaged by the projection (8) to open the entrances (22) when the projection (8) passes into the first recess (54).
10. A tool according to any one of the preceding claims wherein the dust collection unit (40) includes a fan (49) powered by the motor (51) of the unit so as to generate a dust collecting airflow.
11. A tool according to claim 10 wherein the dust collection unit comprises a shroud (32) for collecting dust from the region of a tool or bit (32) of the tool, which shroud communicates with a filter housing, incorporating a filter, such that an airflow generated by the fan passes into the shroud, into the filter housing and then into the fan.
12. A tool according to any one of the preceding claims additionally including a guide projection (62) and a corresponding guide bore (58), one of which is formed on the tool and the other of which is formed on the unit, located adjacent the respective part of the second mechanical fixing arrangement (72, 66).

13. A tool according to claim 12 wherein the guide projection (62) and guide bore (58) extend at an oblique angle, and preferably perpendicularly, to a latching peg of the releasable fixing arrangement (72, 66).

14. A tool according to any one of the preceding claims wherein the releasable fixing arrangement is a releasable latch arrangement (72, 66).

15. An electrically powered hand held drilling and/or hammering tool having a dust collection unit substantially as hereinbefore described with reference to any one of the accompanying drawings.

16. A dust collection unit powered by a motor (51) housed in the unit, which unit is suitable for fitting to an electrically powered hand held drilling and/or hammering tool, comprising:

one of a plug arrangement (12) or a cooperating socket arrangement (28), the other of which is formed on such a tool, for electrically connecting a power supply for such a tool to the motor (51) of the unit;

a first mechanical fixing arrangement comprising one of a first projection (8) or a first cooperating recess (54), the other of which is formed on such a tool, which first mechanical fixing arrangement is located adjacent the one of the plug and socket arrangement on the unit; and

a second mechanical fixing arrangement, located remotely from the first and comprising one of a manually actuatable releasable fixing arrangement (72,66) or a second cooperating recess (60), the other of which is formed on such a tool,

wherein the first mechanical fixing arrangement cooperates and the second mechanical fixing arrangement cooperates with respective cooperating arrangements on such a tool to secure the dust collection unit to such a tool in such a way that the plug or socket arrangement on the unit forms an electrical connection to such a tool.

17. A unit according to claim 16 wherein, the first mechanical fixing extends in a direction at an oblique angle to, and preferably substantially perpendicular, to the direction in which the second mechanical fixing extends.

18. A unit according to any one of the claims 16 or 17 wherein the plug arrangement (12) is located on the unit and comprises a plurality of electrical connection pins (6) and the first

projection (8) is located on the unit adjacent to the plug arrangement (12) and extends alongside the pins.

19. A unit according to any one of claims 16 to 18 wherein the plug arrangement (12) and the first projection (8) are located adjacent each other on the dust collection unit.

20. A unit according to any one of claims 16 to 19 which includes a fan (49) powered by the motor (51) of the unit so as to generate a dust collecting airflow.

21. A unit according to claim 20 which includes a shroud (32) for collecting dust from the region of a tool or bit (32) of the tool, which shroud communicates with a filter housing, incorporating a filter, such that an airflow generated by the fan passes into the shroud, into the filter housing and then into the fan.

22. A dust collection unit which is suitable for fitting to an electrically powered hand held drilling and/or hammering tool substantially as hereinbefore described with reference to any one of the accompanying drawings.